Section I:

AMENDMENT UNDER 37 CFR §1.121 to the

CLAIMS

1.   (currently amended) A logical device for handling dynamic attributes in a static
directory comprising:

        a set of attribute declarations for a directory structure containing at least one
declaration for a directory attribute to be handled ~~dynamically~~ as a real-time attribute,
the value of said declared real-time attribute being ~~whose value~~ retrievable ~~outside~~
external of ~~static memory of a~~ said directory structure and being in a format incompatible
with a directory access request return format;

        at least one Real-time Attribute Processor (RTAP) configured to dynamically
resolve a real-time value for an attribute ~~declared as being real-time in said set of~~
~~attribute declarations~~ by obtaining an attribute value from a real-time source external to
said directory structure, said obtained value being incompatible with a directory access
request return format, and by converting said obtained value to conform to a directory
request return format;

        an RTAP selector configured to select ~~and invoke~~ an RTAP from a plurality
of attribute processors according to a predetermined selection schema, and to invoke said
selected RTAP; and

        a directory attribute processor configured to parse requests for access to
directory attribute values, to detect requests for attributes declared as real-time
in said attribute declarations, to operate said RTAP selector to invoke a corresponding
RTAP, to receive an attribute value resolved and compatible with a directory access
request return format from ~~determined by~~ said ~~invoked~~ RTAP, and to return said real-
time attribute value to a requester.

2.   (previously presented) The logical device as set forth in Claim 1 wherein said directory
attribute processor is further adapted to suppress storage of said resolved attribute value
in a directory.

3.   (previously presented) The logical device as set forth in Claim 1 wherein said RTAP selector is configured to select an RTAP based upon a variation of a name of said requested directory attribute.

4.   (original) The logical device as set forth in Claim 3 wherein said name variation comprises a name identifying a function selected from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.

5.   (original) The logical device as set forth in Claim 1 wherein said RTAP comprises a function selected from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.

6.   (original) The logical device as set forth in Claim 1 wherein said RTAP and said directory attribute processor are configured to handle Lightweight Directory Access Protocol requests for attribute values.

7.   (previously presented) The logical device as set forth in Claim 1 wherein said directory attribute processor is configured to disallow attribute modify requests for attributes declared as real-time.

8.   (currently amended) A method for dynamically handling real-time attributes in
a static directory server comprising:

  providing at least one declaration for an attribute to be ~~dynamically~~ handled as a
real-time attribute in <u>a directory structure</u> ~~association with a set of directory attribute~~
~~declarations~~, the value of said real-time attribute being retrievable ~~outside~~ <u>external</u> of
~~static memory of a~~ <u>said</u> directory structure <u>and being in a format incompatible</u>
<u>with a directory access request return format</u>;

  parsing requests for access to directory attribute values to detect requests
for attributes declared as real-time in said attribute declarations;

  invoking at least one Real-time Attribute Processor (RTAP) selected <u>from a</u>
<u>plurality of attribute processors</u> according to a predetermined selection schema, said
invoked RTAP being configured to ~~dynamically~~ resolve a real-time value ~~for an attribute~~
~~declared as being real-time in said set of attribute declarations~~ by obtaining an attribute
value from a real-time source external to said directory structure, <u>said obtained value</u>
<u>being incompatible with a directory access request return format,</u> and by converting said
obtained value to ~~conform to~~ <u>be compatible with</u> a directory request return format; and

  returning to a requester [[an]] <u>said resolved and access-request-return-format</u>
<u>compatible</u> attribute value ~~determined by said invoked RTAP~~.

9.   (original) The method as set forth in Claim 8 wherein said step of selecting and invoking
a RTAP selector comprises selecting an RTAP based upon a variation of a name of
said requested directory attribute.

10.   (original) The method as set forth in Claim 9 wherein said step of selecting an RTAP
based upon an attribute name variation comprises selecting an RTAP from the group of
a logical device, a device address, a name of a JAVA class, a name of a UNIX
shared object, and a name of a dynamically linked library module.

11.   (original) The method as set forth in Claim 8 wherein said step of invoking an RTAP comprises invoking an RTAP from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.

12.   (original) The method as set forth in Claim 8 wherein said step of parsing a request comprises parsing a Lightweight Directory Access Protocol requests for attribute values.

13.   (currently amended) The method as set forth in Claim 8 wherein said step of returning to a requester an attribute value ~~comprising~~ <u>comprises</u> returning said value according to a Lightweight Directory Access Protocol.

14.   (currently amended) An article of manufacture comprising:

a computer readable medium suitable for encoding software programs; and

one or more software programs encoded by said medium and configured to cause

a processor to perform the steps of:

(a)   providing at least one declaration for an attribute to be ~~dynamically~~ handled as a
real-time attribute in <u>a directory structure</u> ~~association with a set of directory~~
~~attribute declarations~~, the value of said real-time attribute being retrievable
~~outside~~ <u>external</u> of ~~static memory of a~~ <u>said</u> directory structure <u>and being in a</u>
<u>format incompatible with a directory access request return format</u>;

(b)   parsing requests for access to directory attribute values to detect requests
for attributes declared as real-time in said attribute declarations;

(c)   invoking at least one Real-time Attribute Processor (RTAP) selected <u>from a</u>
<u>plurality of attribute processors</u> according to a predetermined selection schema,
said invoked RTAP being configured to ~~dynamically~~ resolve a real-time value ~~for~~
~~an attribute declared as being real-time in said set of attribute declarations~~ by
obtaining an attribute value from a real-time source external to said directory
structure, <u>said obtained value being incompatible with a directory access request</u>
<u>return format,</u> and by converting said obtained value to ~~conform to~~ <u>be compatible</u>
<u>with</u> a directory request return format; and

(d)   returning to a requester [[an]] <u>said resolved and access-request-return-format</u>
<u>compatible</u> attribute value ~~determined by said invoked RTAP~~.

15.   (previously presented) The article as set forth in Claim 14 wherein said software
for selecting and invoking an RTAP selector comprises software for selecting an RTAP
based upon a variation of a name of said requested directory attribute.

16.   (previously presented) The article as set forth in Claim 15 wherein said software for selecting an RTAP based upon an attribute name variation comprises software for selecting an RTAP from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.

17.   (previously presented) The article as set forth in Claim 14 wherein said software for invoking an RTAP comprises software for invoking an RTAP from the group of a logical device, a device address, a name of a JAVA class, a name of a UNIX shared object, and a name of a dynamically linked library module.

18.   (previously presented) The article as set forth in Claim 14 wherein said software for parsing a request comprises software for parsing a Lightweight Directory Access Protocol requests for attribute values.

19.   (previously presented) The article The medium as set forth in Claim 14 wherein said software for returning to a requester an attribute value comprising software for returning said value according to a Lightweight Directory Access Protocol.